

In the Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application:

- 5 1. (canceled)
2. (canceled)
3. (canceled)
- 10 4. (canceled)
5. (currently amended) A method of constructing an electronic system from a set of components comprising:
- 15 _____ selecting one or more key system parameters,
- _____ creating a model of the system based on component performance,
- _____ performing a sensitivity analysis on the model to identify critical components
- _____ and parameters of those components required to meet the key system parameters,
- _____ performing tests on the identified critical components to measure the identified
- 20 _____ parameters producing a set of measurements for each critical component,
- _____ associating the set of measurements with the critical component,
- _____ storing the set of measurements as an entry in a database,
- _____ associating the database entry with an identifier for the critical components,
- _____ selecting individual critical components for assembly into a system based on
- 25 _____ the associated measurements such that the resulting system meets the key system
- _____ parameters, and
- _____ assembling the system using the measurements associated with the
- _____ components.
- 30 6. (amended) The method of Claim 5 where the identifier for the critical component is a serial number.

7. (amended) The method of Claim 5 where the identifier for the critical component is a sequence number.

5 8. (amended) The method of Claim 5 where the identifier for the critical component is a location in a component carrier.

9. (canceled)

10 10. (amended) The method of Claim 5 2 where assembling the system using the measurements associated with the critical components further comprises:
assembling the system from a set of components,
retrieving the measurements associated with each of the set of identified critical components, and
calculating system calibration coefficients using the retrieved measurements.

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11. (amended) The method of Claim 10 where associating the set of measurements further comprises storing the set of measurements in a memory which is part of the critical component.

20 12. (amended) The method of Claim 10 where associating the set of measurements further comprises storing the set of measurements in a memory which is attached to the critical component.

25 13. (amended) The method of Claim 10 where associating the set of measurements further comprises storing the set of measurements as an entry in a database, and associating the database entry with an identifier for the critical component.

14. (amended) The method of Claim 13 where the identifier for the critical component is a serial number.

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15. (amended) The method of Claim 13 where the identifier for the critical component is a sequence number.

16. (amended) The method of Claim 13 where the identifier for the critical component is a location in a component carrier.

17. The method of Claim 10 where associating the set of measurements further
5 comprises grouping components according to measurements.